EXHIBIT A

CURRICULUM VITAE ANDRES ALTMANN

Grinberg 15 Haifa Israel (972) 48245976 (home) (972)546227325 (mobile) Email:aaltmann@its.jnj.com

EDUCATION

Technion, Israel Institute of Technology, Haifa, Israel

MSc. in Biomedical Engeeniring (2005)

Technion, Israel Institute of Technology, Haifa, Israel

BSc. in Electrical Engeeniring (1996)

EMPLOYMENT

July, 2001 - Present

Biosense Webster (Israel) a Johnson and Johnson company, Tirat-Hacarmel, Israel

July, 2008 – Present manager of the advanced R&D group in Israel (Innovation group)

The Main responsibility is to manage all the feasibility projects. The Main projects are in the field of 4D ultrasound, Catheter multi-electrode visualization, catheter pressure sensing and lesion assessment.

July, 2001 – January, 2008 project manager at the advanced R&D group (Innovation group) Key role in many feasibility projects in the advanced R&D group and specifically in the development of CARTOSOUND system

- <u>Leading the CARTOSOUND feasibility project</u> Using 2D ultrasound images to reconstruct
 a 3D anatomical model of the heart. Involve in all the project aspects from requirements
 definition, ultrasound transducer development, ultrasound catheter development, catheter
 calibration, software development, system testing and validation in animal cases.
- Orthopedic navigation system Developing implantable miniature capsule for orthopedic procedures implants. Main development was done in the field of wireless power transfer, miniaturization, Navigation system and wireless synchronization.
- Asic Instrumentation amplifier Design Designing a low cost amplifier replacement.
- <u>Lesion assessment system</u> using pacing threshold during ablation to monitor and assess lesion formation. Pacer hardware design and application.

April, 1998 - June, 2001 Carmel Biosensors Ltd. , Haifa, Israel

HW and signal processing engineer. Developing algorithm for glucose continuous monitoring based on a minimal invasive sensor utilizing gerbil pancreas beta cells electrical activity. Using algorithms developed for speech recognition for analyzing the cells electrical activity. Investigate different classification methods for identification of the glucose levels. Signal filtration. Analyzing the clinical trials results. Development of the acquisition system: low noise analog filter design and Labview acquisition software. Design of miniature electrode circuit for the cell based sensor.

July, 1996 - August, 1997 Lanoptics Ltd., Migdal-Haemek, Israel

R&D Hardware engineer. Board design of CPU cards and PCI back plane for Ethernet switch. Schematics in Orcad software, layout escorting and development of card testing environment. Programming of FPGA programmable devices (ALTERA). Transfer from development to production.

SKILLS

- Software tools: Visual studio 6.0, Matlab, Labview, Orcad, PCB editor, Spice
- Extensive expertise with design, in-vitro and in-vivo evaluation, and use of a variety of systems and minimally invasive devices, including catheters for cardiac electrophysiology.
- Extensive expertise in low power miniature electronics

PATENTS

US6484118B1 Electromagnetic position single axis system; **US6332089B1** Medical procedures and apparatus using intrabody probes;

US6400981B1 Rapid mapping of electrical activity in the heart;

US6716166B2 Three-dimensional reconstruction using ultrasound;

TIC2007010C14C A 1 Complementary Control of Control of

US20070106146 A1 Synchronization of ultrasound imaging data with electrical mapping;

PUBLICATIONS

Three-Dimensional Ultrasound for Image-Guided Mapping and Intervention: Methods, Quantitative Validation and Clinical Feasibility of a Novel Multi-Modality Image Mapping System; Yasuo Okumura, Benhur D. Henz, Susan B. Johnson, T. Jared Bunch, Christine J. O'Brien, David O. Hodge, Andres Altman, Assaf Govari and Douglas L. Packer; Circ Arrhythmia Electrophysiol published online Apr 30, 2008;